

AMENDMENTS TO THE SPECIFICATION:

Please add the following section title to page 1, line 2:

BACKGROUND OF THE INVENTION

Please add the following section title to page 3, line 17:

OBJECTS OF THE INVENTION

Please make the following amendments to paragraph 1 beginning on page 4, line 1:

In order to achieve the objectives presented above and those emerging hereinafter, the solution according to the invention is characterised by the features ~~presented in the characterising part of the independent claim 1, 2, 3 or 4~~ described below.

Please add the following section title to page 4, line 4:

BRIEF SUMMARY OF THE INVENTION

Please make the following amendments to paragraph 2 beginning on page 4, line 5:

~~Claims 1, 2, 3 and 4 describe~~ The present invention describes four ways of treating black liquor or other spent liquor, each one having in common the use of a pyrolysis process as one sub-step in the recovery of chemicals and energy. The pyrolysis is carried out as a separate unit process, that is essentially different from the gasification, which is also applied as a further treatment step in two solutions according to the invention.

Please add the following section title to page 8, line 10:

BRIEF DESCRIPTION OF THE DRAWINGS

Please add the following section title to page 8, line 29:

DETAILED DESCRIPTION OF THE INVENTION

Please make the following amendment to the ABSTRACT on p. 9, line 1:

Method for treatment of spent liquor at a pulp mill, in which method at least a part of the spent liquor flow (10) arriving from the evaporation plant is taken to a pyrolysis reactor (1), wherein it is pyrolysed at a temperature of 300-800°C in order to separate evaporable compounds (12) from the coke (11) remaining in a solid state. The pyrolysis products (12), which are gases or liquids, may be used as fuel or they may be processed further. The coke (11) resulting from the pyrolysis is burnt in a soda recovery boiler (3) or in a gasification reactor (2) to regenerate cooking chemicals. The method is suitable for recovery of chemicals and energy both in sulphate and sulphite processes and also in cooking methods based on organic solvents.

(Fig. 2)